

# Know thyself: Coaching for leadership using Kolb's Experiential Learning Theory

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*This article discusses the role of professional coaches who apply Kolb's Experiential Learning Theory as a means of enhancing their client's leadership capabilities. The authors posit that Kolb's four learning modes and styles provide a guiding structure for professional coaches to individualise their approach to coaching leaders to overcome the leader's overreliance on their dominant learning style and appropriately access more effective behaviours in handling the myriad of responsibilities they face. It is equally important for coaches to know their own learning styles to be more effective in their coaching role. A coach's ability to access all four modes and learning styles in themselves can foster more effective coaching practices so that they may more effectively coach others whose learning styles are different from their own. The authors conclude that Kolb's Experiential Learning Theory provides a sound theoretical framework to help professional coaches in the development of the organisation's leadership capacity.*

**Keywords:** coaching; Kolb's Experiential Learning Theory; leadership.

IT IS WELL ESTABLISHED that the ability to develop leadership skills is central to the sustainable effectiveness of any organisation. Over the years, Human Resources (HR) has played significant roles in implementing strategies through leadership development and coaching programmes for managers and leaders. What has not been as evident in the literature is the use of David Kolb's Experiential Learning Theory as a conceptual frame from which human resources programmes can strategise the development of its organisation's leadership to create what Raelin (2003) and Wheatley (2006) call a 'leaderful' organisation. In a 'leaderful' organisation everyone shares the collective and concurrent experience of serving as a leader either formally or informally. Among those skills needed to develop such collective leadership is the ability to access and choose appropriate modes of behavior for achieving specific outcomes. Many (Armstrong & McDaniel, 1986; Jackson, 2002; Holman, Pavlica & Thorp, 1997; Katz, 1990; Kayes, 2002), have argued that having access to all four modes and learning styles can help potential leaders become flexible and discerning in responding to organisational problems.

However, leaders frequently engage in self-limiting behaviours because of their overreliance on their preferred ways of reacting and responding. Kolb's Experiential Learning Theory provides a particularly useful framework for coaching managers in developing the leadership skills necessary to most effectively manage complex situations and the coaching relationship. We argue that an effective coach can adapt his/her learning style to mesh with the preferred learning style of their client to enhance the coaching process.

Professional coaches may unknowingly fall into the trap of trying to coach others, relying too heavily on their own preferred learning styles rather than adapting to the style of those whom they are attempting to coach. The authors' combined experience of over 70 years as coaches has shown us that David Kolb's Experiential Learning Model provides professional coaches a compelling lens from which to look at our own preferred learning styles and those with whom we work.

Kolb's experiential Learning Styles Inventory (LSI) is one of 70+ instruments reviewed by Coffield et al. (2004) for assessing adult learning styles. The most

common learning styles assessments typically focus on the evaluation of the individual's most comfortable method for learning, such as receiving instruction verbally, visually or kinesthetically.

Some (Freedman & Stumpf, 1980) claimed that the Learning Style Inventory was flawed as a psychometrically valid instrument. Pashler et al. (2008) argued that the data reviewed for their study did not provide support for the learning styles hypothesis that tailoring teaching to the learner's proclivities would make a difference. Reynolds (1997) argues that in addition to Kolb, there are other 'intuitively appealing' theories of styles to consider, such as Pask's (1976) typology or Biggs (1979) taxonomy. Alternatives to these, and Kolb's cognitive learning styles, are the conditions in which learning occurs; such as, the social and institutional environment making the learning context dependent (Laurillard, 1979) which have been found to support greater quality of learning in some studies (Trigwell & Prosser, 1991). None the less, we have found the LSI to be a useful vehicle for coaching clients in complex situations. Indeed, an attractive feature of Kolb's experiential learning theory is the discussion that is provoked from the recognition of the uniqueness, complexity, and variability of specific learning situations. The focus of Kolb's Learning Styles model lies squarely in the experiential learning process rather than on fixed learning traits. In fact, there is substantial empirical support for the theory of experiential learning and the theory's constructs (Carlsson, Keene & Martin, 1976; Clarke, Oshiro Wong & Yeung, 1977; Fry 1978; Gish, 1979, 1980; Griggs, 1979; Gypen, 1980; Kolb, 1981; Manring, 1979; Plovnick, 1975; Sims, 1980; Wolfe & Kolb, 1979) as cited in Kolb (1981). Kolb (1981) himself contends that experiential learning style preferences are not fixed traits, but will vary from time to time and situation to situation given that 'change and adaptation to environmental circumstances are central to any concept of learning' (p.290).

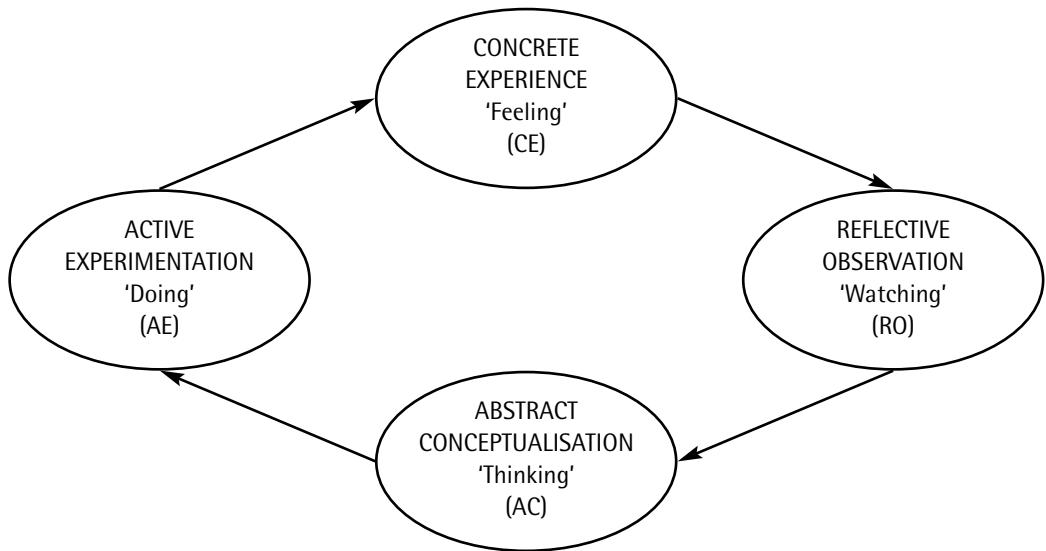
Kolb's Experiential Learning Theory (1984) posits that there are four modes that people may engage in any given experience. He refers to them as, concrete experience, reflective observation, abstract conceptualisation and active experimentation. The use of each of these modes leads to a specific way of approaching, understanding and acting on a problem. Later we will discuss how these four modes combine to form four distinct learning styles.

Since coaches tend to rely on their preferred dominant modes for learning, they thereby potentially limit their opportunities to either lead or coach in the most effective manner. Effective coaching using Kolb's experiential learning model can help those in leadership positions develop their capabilities so that they may respond most appropriately to a given situation. However, it is important that coaches have an awareness of their own learning preferences as they work with others lest they treat all their clients using their preferred learning style instead of that of the client's. Therefore, effective coaching requires that they heed the precept inscribed in gold letters over the portico of the temple at Delphi, 'Gnothi Seauton', the ancient Greek aphorism for 'know thyself' or to have self knowledge. Kolb's experiential learning model provides the opportunity for gaining self-knowledge so that, as coaches, we may individualise the way we effectively coach.

### **Kolb's Experiential Learning Theory**

Kolb's Experiential Learning Theory works on two levels, grasping and transforming experiences – establishing the framework for four distinct learning styles that are based on the four-mode learning cycle (see Figure 1). Learning therefore, involves two dialectical modes for grasping experience – concrete experience and abstract conceptualisation. Then, there are two dialectical modes for transforming experience – reflective observation and active experimentation (Kolb, 1984, p.41).

**Figure 1: The Four Modes of the Learning Cycle.**



We are stressing the importance of being conscious and deliberate about learning from experiences. In coaching our clients over the years, we have seen significant differences in how they learn from their experiences. As a result, we have concluded that leadership development is a highly individualised process. Nevertheless, these individual differences tend to fall into patterns approximating Kolb's four modes. Extrapolating from Kolb's experiential learning theory, we posit leadership development as a holistic process of adaptation to the world.

Truly effective leaders are able to rely on the four learning modes in whatever combination the situation requires of them. Piaget (1969), Freire (1974), Dewey (1958) and Lewin (1951) all stressed that the heart of learning lies in the way we process experience, in particular, our critical reflections on experiences and the meanings we draw from them. The combination of grasping and transforming experience as part of continuous learning in multiple modes creates a synergy, which can produce dynamic and powerful leadership. Kolb (1976, 1984) theorised that while every individual utilises

each mode to some extent, he/she has a preferred mode of learning resulting from an individual tendency to learn primarily through one of the four modes. Moving leadership coaching beyond this preferred, often habitual, over reliance on one or two modes at the expense of the others can be a major challenge for the coach.

### **Leadership Practice using Experiential Learning Theory**

Most readers have been engaged in a performance appraisal. The following case example is provided to explain the use of Kolb's Experiential Learning Theory when coaching. Consider Mary, a health care manager, who is trying to enhance her leadership skills, and Jane, an HR Manager. Mary is aware that she has to give one of her direct reports (John) his performance review and that John has a history of becoming very angry and upset in these reviews. He does not accept criticism or constructive feedback well. His behaviour may jeopardise his long term future in the organisation. Mary went to Jane for some help with this situation.

Jane's first response was to sit with Mary and help her think through the best way to approach John, but then she began to think about the other managers in their organisation who had equally difficult situations. Rather than responding tactically, she began to think strategically for the organisation. She decided to talk to a former colleague, Stephanie, who was now an independent coach with a special focus on coaching managers for success. After the two of them talked, Jane asked Stephanie to come into the organisation and work with Mary. Jane told Stephanie that she wanted to see how things worked with John and that she might want Stephanie to work with a number of other managers in the organisation. Stephanie agreed that this was a good approach and began working with Mary.

After Jane introduced the idea of coaching to Mary and she agreed, Stephanie's initial visit with Mary was to gather information about Mary, her history and her experiences as a manager. Stephanie also wanted to understand what Mary saw as her strengths, her areas of growth, the things that frightened her about her job and the areas where she felt most confident. Stephanie then explained Kolb's Experiential Learning Theory and asked Mary to take a self-report instrument called the Learning Style Inventory (LSI) (2005).

Stephanie emphasised how important it was to understand what *your* learning style was and how *not to expect* that everyone else learned the way you did. Stephanie first described the **four modes** of Kolb's Learning Theory: Abstract Conceptualisation (AC) – *Thinking* about the issues; Active Experimentation (AE) – *Doing* something about the issue or situation; Concrete Experience (CE) – *Feeling* the experience of the activity; and, Reflective Observation (RO) – *Watching* what the issue or situation is generating. The process is circular and can begin with any of the four modes. Talking about Kolb's theory gave Mary some experience using Kolb's abstract conceptualisation dimension and having Mary actually take the LSI gave Mary

some information about her own learning style.

### Leadership Coaching with Kolb's Experiential Learning Styles

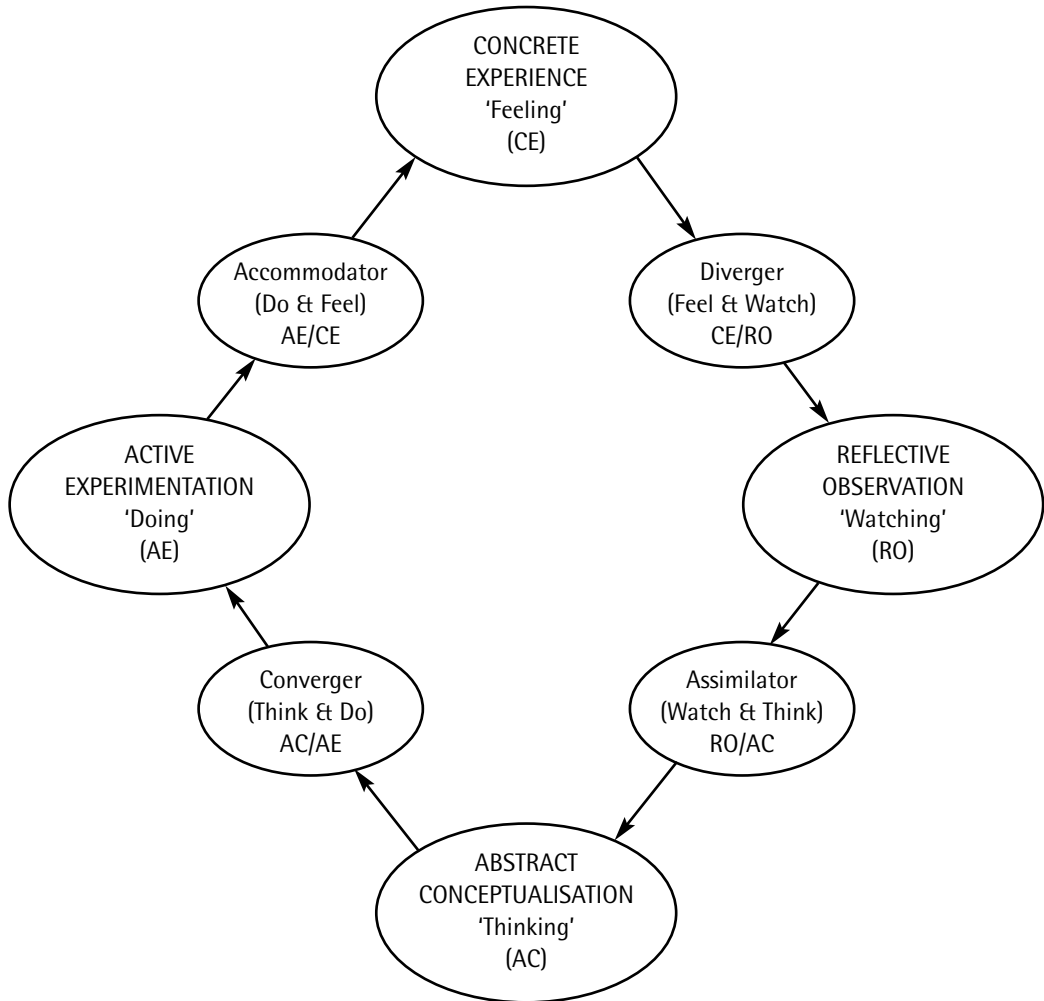
To give further depth to experiential learning theory, Kolb (1984) combined his modes of learning to create four types of learners: *Diverger* (reflective observation – concrete experience), *Assimilator* (reflective observation – abstract conceptualisation), *Converger* (active experimentation – abstract conceptualisation), and *Accommodator* (active experimentation – concrete experience) as depicted in Figure 2. A *Diverging* style is characterised by the dominant learning abilities of concrete experience and reflective observation. An *Assimilating* style is characterised by the dominant learning abilities reflective observation and abstract conceptualisation. A *Converging* style is characterised by the dominant learning abilities of abstract conceptualisation and active experimentation, while an *Accommodating* style is characterised by the dominant learning abilities of active experimentation and concrete experiences.

The strengths of the *Divergers'* learning style, lies in their imaginative and creative abilities, and in their ability to understand and tune into others. *Divergers* have an imaginative ability to perform best in situations calling for the generation of many alternative (often divergent) ideas and implications, as is done in brainstorming (Kolb, 1984).

The strengths of *Assimilators* are their ability to systematically plan, organise, analyze, the create models and theories, and engage in inductive reasoning. Those with this learning style are strongest at understanding a wide range of information and putting it into a concise, logical form (Kolb,1984).

In contrast, those who perceive or gather new information abstractly and process or transform it actively possess a *Converging* style. Their greatest learning strengths lie in their ability to set goals, solve problems, make decisions, and test out new ideas (Kolb, 1984).

Figure 2: The Four Learning Styles.



The greatest strengths of *Accommodators* are their ability to carry out plans and tasks, initiate activities and get involved in new experiences. They often take on leadership roles, are at ease in dealing with people, and are likely to be risk takers (Kolb, 1984).

### Potential leadership pitfalls of over reliance on dominant learning styles

Just as leaders' over reliance on a particular dimension can impair their ability to understand and solve problems, over reliance on a particular learning style in coaching may have the same effect. We have observed that

learning styles have a significant impact on how people look at and frame leadership experiences. Styles that are over utilised at the expense of others can lead to incomplete learning experiences and poor performance. While we each have the ability to utilise all of the four styles, we tend to be more comfortable using one of them over others. And, since effective leadership and coaching for leadership entails the ability to access any one of four styles as needed, the inability to use all of these styles may impede success in both a coaching and leadership experience. Leaders and coaches who understand their

preferred experiential learning styles can capitalise on their strengths, while focusing on undeveloped ones. Kolb (1984) provides some valuable insights into the ways learning styles play out in leadership roles.

Since *Divergers* are good at seeing relationships, looking for possibilities and alternatives, and discovering meaning and value in different situations, they tend to be more interested in interpersonal relationships and feelings. Both the strength and liability of *Divergers* lie in their desire to search unceasingly for new possibilities and solutions. On the negative side, as the name implies, they may diverge from the problem or situation at hand and go off on a tangent, straying significantly from the task.

If Ted is a *Diverger* in charge of a group, he will continually look for the optimal solution, even when the group is beyond the point where it is practical to adjust or change directions. *Divergers* can ponder the possibilities of a problem or situation for a long time and forestall moving forward productively. As a *Diverger*, Ted may need to seek assistance in keeping to a timeline and understanding when to move forward on the project.

If, on the other hand, Ted is a *Converger*, he will develop a solution and decide quickly on an answer. They are more technically than interpersonally oriented. Since they like to solve specific problems and work on tasks with practical applications, difficulties may arise when they ignore information that they think is not important or pertinent to a problem. They also tend to rush to a decision without fully gathering details and examining different solutions. If Ted is a *Converger* in charge of a group, he may let his own biases affect the decision-making and discourage the group from looking at differing ideas and opinions. He may need to seek assistance in reminding him to stay open to others' ideas.

Groups made of mostly *Convergers* tend to arrive at solutions quickly and marginalise *Divergers* as people who are seen as out of touch with reality or group members impeding their decision making progress.

As a group, *Convergers* can shut others out in their haste to decide and choose a course of action. Based on our observations, *Convergers* and *Divergers* tend to frustrate one another as they are diametrically opposed in their approaches, with one group generating ideas and the other trying to focus on a solution.

*Assimilators* like to gather and to integrate data and information – hence the name. They tend to think quietly and are more concerned with data than with people; therefore, they are more comfortable in the realm of the theoretical. They are more concerned with gathering data than implementing action steps. In their efforts to gather facts and figures, they can appear indecisive exhibiting 'analysis paralysis'.

If Ted is an *Assimilator*, he will ask for more information and delay making a decision until all of the facts and pertinent data are known. *Assimilators* want all of the necessary assumptions addressed with as few unknowns as possible. As an *Assimilator*, Ted may need assistance in understanding when he has enough information to make and implement a decision.

*Accommodators* like to initiate and complete tasks. They quickly respond to needs, involving others, and can be impatient with those who lack the same sense of urgency. They tend to focus on the whole problem, overlooking or delegating challenging details. If Ted is an *Accommodator* in charge of a decision-making group, he may want to avoid problems and details that threaten task completion. As an *Accommodator*, Ted may need assistance in being open to input from others and patient with the process. Just as *Divergers* and *Convergers* can frustrate each other because their styles are so different, *Accommodators* and *Assimilators* can also drive each other crazy – or at the very least, make working together difficult. *Accommodators* want to move quickly, take risks to get the problem solved and move on to the next issue. *Assimilators* want to gather more and more data, analyse it well, develop theories and only then, move slowly and

cautiously forward. Clearly, these learning styles and 'mind-sets' are opposite and those with these style preferences can be oppositional with one another. Leaders, managers and coaches need to understand the 'pros and cons' of all four of the learning styles if they are going to have an impact on those with whom they work. Leaders without this understanding will rarely develop high performing teams.

Returning to our earlier case example of Mary and Stephanie, in order to understand the four learning styles, Stephanie suggested that Mary 'role play' a performance review with Stephanie becoming four different people with four different learning styles – a *Diverger* (a person who *feels and watches* what's going on), an *Assimilator* (the person who is *watching and thinking* about what is going on), a *Converger* (one who is *thinking* about what is going on and is *doing* something active in the process) and, finally, an *Accommodator* (a person who is *doing* something active and is *feeling* what is happening to themselves and others in the situation). This provided Mary with some experience with Kolb's active experimentation dimension to add to the theoretical knowledge they had been talking about earlier.

At the end of the role playing experiment, Stephanie asked Mary what she felt was different about each approach – which she was most uncomfortable with and why; what she would have done differently in each situation and how effective she thought each review was. This was the concrete experiential dimension of Kolb's theory.

Stephanie then showed Mary Table 1, (overleaf), and asked Mary to think in Kolb's terms (abstract conceptualisation) about where her preferences were, where each member of her management team's preferences were (reflective observation) and what approaches she needed to take with each of her people (active experimentation). Mary then thought about the four modes, the four learning styles and how her learning style was similar and/or different from the members of her team. Stephanie and Mary

worked together to identify what they thought were the predominant learning styles of each member of Mary's team and then planned an approach to each performance evaluation session.

### **Different coaching approaches for different folks**

Mary had four subordinates working for her. They were all managers and three of the four of them had styles that were different than Mary's. After working with Stephanie, Mary learned that she had to adapt her approach to these manager's learning styles if she wanted to have a useful and positive performance appraisal with them. Below is the thinking that Mary used to prepare herself for each of the performance appraisals.

Mary learned that her preferred learning style was an *Accommodator*. As seen in Table 1, she liked to move quickly, take charge, get things done and had a strong sense of urgency. Her downfall was that she frequently moved too quickly without having taken other thoughts, ideas or people's concerns into consideration. Knowing herself, below is how she worked with John.

John's learning style was clearly that of a *Diverger*. Mary had always been impatient with him. He resented her saying that he 'was dragging his feet' and not moving fast enough on issues. This year she looked at the outcomes of his decisions rather than how fast the decisions were made. She needed to balance the creative and inclusive talents that John had with the ultimate impact of his decisions.

The second member of Mary's team was Alice – an *Assimilator*. Mary's *Accommodating* style featured speed, urgency and risk taking as key elements. Mary had to acknowledge the quality of thought that went into Alice's decisions and the models she invented to support those decisions. Mary also needed to ask Alice about the impact of her decisions – their timeliness. To be consistent with Alice's *Assimilator* style: gather data, analyze it, develop understandings and then respond

Table 1: Learning Styles Chart.

<p><b>ACCOMMODATORS</b>          Getting things done          Initiating tasks          Getting personally involved          Willing to take risks          Strong sense of urgency          Needs patience          Speed vs. input</p>	<p><b>DIVERGERS</b>          Creative          Involve others in their process          Try to view concrete solutions from different perspectives          Do something new just for the sake of it          People oriented          Can miss the point          Difficulty actually making decisions          Focus vs. more ideas</p>
<p><b>CONVERGERS</b>          Makes decisions from alternatives available          Move towards decisions very fast          Finds practical uses for theories          May shut out information that does not fit the solution they develop          May not involve others with different views          Technical vs. people</p>	<p><b>ASSIMILATORS</b>          Organising and integrating information          Planners          Creating models          Developing theories          Slow to make decisions          Data vs. people</p>

\*Adapted from Kolb: Learning Styles Inventory (2005).

to the information, Mary decided to divide the performance appraisal session into two parts. On the first day, Mary shared her positive observations and concerns and then let Alice have a day or two to think about things. Mary and Alice then met for a second time and had the conversation about how to improve her performance.

Luke was a *Converger*. Both Mary and Luke shared the desire to make decisions quickly, but while Mary was willing to take risks and lead others, Luke wanted to operate alone or with ‘like thinkers’. He wanted to feel safe and logical with his quick decision making.

Mary needed to acknowledge Luke’s ability to gather data and make logical decisions quickly, but she needed him to slow the process down. She needed to acknowledge his ability to use the information he had and to encourage him to expand his data base with the thoughts, ideas and the experiences of people whom Luke thought, initially, did not seem to support his thinking. Luke was clearly not a risk taker so she needed to help

him see the benefits of changing his process to include the input of others.

The final member of Mary’s team was Jeanine. Jeanine’s learning style was much like Mary’s – an *Accommodator*. They both wanted to get the job done, lead the task and do it quickly. Mary’s approach with Jeanine was to acknowledge their similarities, but to reinforce the need to look at the ‘downsides’ of their learning style. Specifically, that they both needed to slow their process down, take more time to define the problem, gather more information and, sometimes, actually let others take the lead. Mary actually had the most difficult time working with Jeanine because Jeanine’s stresses and successes were so familiar and comfortable to Mary.

The essence of Mary’s work with her four subordinates was to understand where she was in terms of her preferred learning style, **then** acknowledge the preferred learning styles of her subordinates. Mary had to be sure that she saw the positive elements of the different styles and, at the same time, continue to encourage her direct reports to



explore the boundaries of their comfort zone. Mary learned that no one learning style is perfect, but that there are great elements in each. Her job was to help them all see where they could press the boundaries of their own comfort zones so that they could integrate some of the positive elements of the other styles. Mary's job was definitely *not* to make them all like her.

Stephanie's coaching had a profound effect on Mary. She approached each team member differently, but appropriately. Their response was very positive, even with John. Jane saw that the impact of the coaching Stephanie gave Mary was truly significant. She realised that each of her managers needed to understand their own learning style and needed to learn how to adjust their predominant learning style to the learning styles of each of their direct reports. Her strategic decision was to have a one-day 'learning seminar' led by Stephanie and Mary for all of her direct reports to frame Kolb's Experiential Learning Theory. The seminar had several elements: a discussion of Kolb's theory; some realistic role playing; a look at each manager's learning style; and, finally, some reflecting time for each of the managers to look at their direct reports and think about how to approach each person's performance review. The seminar included at least three consulting/coaching follow-up sessions with Stephanie for each manager. Mary would continue to work with Stephanie and eventually become an internal coach for the rest of the staff.

### **Conclusion**

As the contemporary workplace becomes increasingly diverse, professional coaches are called upon to recognise and address these leadership challenges. Professional coaches understand the importance of ensuring that an organisation's leaders are knowledgeable and sensitive to the specific needs of their workforce by providing effective leadership coaching approaches.

It is clear that we must work with people differently because we all have very different approaches to leading, learning and life in general. The premise is that if, as leadership coaches, we understand our own learning styles and those of others, we can then adapt our style to be more effective communicators, learners, managers, leaders and coaches. We have suggested that professional coaches must communicate effectively with clients to help them develop their leadership awareness, knowledge and skills. To that end, to be effective leadership coaches and for optimal learning to occur, we need to be familiar with our own learning style preferences, how they are different from our coachees and consequently adjust our coaching strategy to our client's learning style preferences. We are teaching the leaders we coach how to recognise their learning styles and, therefore, the learning styles of the people who work for them. That knowledge will allow them to lead more effectively and productively.

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## References

- Armstrong, P. & McDaniel, E. (1986). Relationships between learning styles and performance on problem-solving tasks. *Psychological Reports*, 59, 1135–1138.
- Biggs, J. (1979). Individual differences in study processes and the quality of learning outcomes. *Higher Education*, 8, 381–394.
- Coffield, R., Moseley, D., Hall, E. & Ecclestone, K. (2004). *Learning styles and pedagogy in post-16 learning. A systematic and critical review*. London: Learning and Skills Research Centre.
- Dewey, J. (1958). *Experience and nature*. New York: Dover Publications.
- Freedman, R.D. & Stumpf, S.A. (1980). Learning style theory: Less than meets the eye. *The Academy of Management Review*, 5(3), 445–447.
- Friere, Paulo (1974). *Pedagogy of the oppressed*. New York: Continuum.
- Holman, D., Pavlica, K. & Thorpe, R. (1997). Rethinking Kolb's theory of experiential learning in management education: The contribution of social constructionism and activity theory. *Management Learning*, 28(2), 135–148.
- Jackson, C.J. (2002). Predicting team performance from a learning process model. *Journal of Managerial Psychology*, 17(1), 6–13.
- Katz, N. (1990). Problem-solving and time: Functions of learning styles and teaching methods. *Occupational Therapy Journal Research*, 10(4), 221–236.
- Kayes, D.C. (2002). Experiential learning and its critics: Preserving the role of experience in management education. *Academy of Management Learning and Education*, 1(2), 137–149.
- Kolb, D.A. (1976). On management and the learning process. *California Management Review*, 18(3), 21–31.
- Kolb, D.A. (1981). Experiential learning theory and the learning style inventory: A reply to Freedman and Stumpf. *The Academy of Management Review*, 6(2), 289–296.
- Kolb, D.A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice Hall.
- Kolb, D.A. (2005). *The Kolb learning styles inventory, Version 3.1*. Boston, MA: Hay Resources Direct.
- Kolb, D.A. & Fry, R. (1975). Toward an applied theory of experiential learning. In C. Cooper (Ed.), *Theories of group process*. London: John Wiley.
- Laurillard, D. (1979). The process of student learning. *Higher Education*, 8, 395–409.
- Lewin, K. (1951). *Field theory in social science; selected theoretical papers*. New York: Harper & Row.
- Pashler, H., McDaniel, M., Rohrer, D. & Bjork, R. (2008). Learning styles: Concepts and evidence. *Psychological Science in the Public Interest*, 9(3), 105–119.
- Pask, G. (1976). Styles and strategies of learning. *British Journal of Educational Psychology*, 45, 12–25.
- Piaget, J. (1969). *The psychology of the child*. New York: Basic Books.
- Raelin, J. (2003). *Creating leaderful organisations: How to bring out leadership in everyone*. San Francisco: Berrett-Koehler.
- Reynolds, M. (1997). Learning styles: A critique. *Management Learning*, 28(2), 115–133.
- Trigwell, K. & Prosser, M. (1991). Improving the quality of student learning: the influence of learning context and student approaches to learning on learning outcomes. *Higher Education*, 22, 251–266.
- Wheatly, M. (2006). *Leadership and the new science: Discovering order in a chaotic world*. San Francisco: Berrett-Koehler.